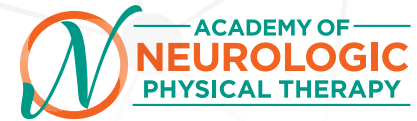


REFERENCE FOR REHABILITATION PROFESSIONALS

CLINICAL PRACTICE GUIDELINES FOR PERIPHERAL VESTIBULAR HYPOFUNCTION



Effectiveness of Vestibular Rehabilitation

- **Strong recommendation (Level I*)** that vestibular rehabilitation should be offered to patients with symptoms due to:
 - Acute, Subacute, & Chronic Unilateral Hypofunction
 - Bilateral Hypofunction, including Pediatrics
- **Benefits:**
 - Reduces dizziness/vertigo, improves gaze stability and reduces imbalance and falls
 - Improves activities of daily living and quality of life
- **Risks:**
 - Potential increase in cost & time for patient to travel
 - May increase symptom intensity at treatment onset
- **Studies show there is a preponderance of benefit compared to harm**
- **Exclusions:**
 - Compensated vestibular loss; cognitive or mobility deficit that impedes effective application; or active Meniere's disease

Factors that Modify Vestibular Rehabilitation Outcomes

- **Weak to strong recommendation (Level I-III*):**
 - Age, gender, and symptom onset time does not affect outcomes
 - Potential harm if rehabilitation delayed
 - May have negative impact on recovery
 - Co-morbidities (anxiety, migraine, & peripheral neuropathy)
 - Vestibular suppressants

Supervised Vestibular Rehabilitation Effectiveness

- **Moderate recommendation (Level I-III*)** that patients with peripheral vestibular hypofunction use customized, supervised exercises
- **Benefits:**
 - Promotes adherence with rehabilitation
 - Better outcomes compared to generic or solely-home programs
 - May be preferred for patients who are fearful of falling or have cognitive or mobility dysfunction
- **Risk:**
 - Potential increase in cost & time for patient to travel
- **Exclusions:**
 - Patients living long distances from therapy may not be able to participate in supervised setting

Optimal Exercise Dose

- **Expert opinion recommendation (Level V*)** for gaze stabilization exercise for unilateral & bilateral hypofunction consists of:
 - Acute/Subacute – Three times/day minimum (At least 12 minutes/day)
 - Chronic – Three times/day minimum (At least 20 minutes/day)
- **Exclusions:** Risk of bleeding or cerebrospinal fluid leak

Saccadic or Smooth Pursuit Exercises Effectiveness

- **Strong recommendation (Level I*)** that voluntary saccadic or smooth pursuit eye exercises should **not** be offered in isolation as gaze stabilization exercises
 - Gaze stabilization exercises, using adaptation & substitution, are more effective
- **Risk:**
 - Causes delay in receiving an effective exercise program
 - Increases cost & time for patient to travel

Effectiveness of Different Exercise Types for Unilateral Peripheral Vestibular Hypofunction

- **Moderate recommendation (Level II*)** for use of targeted exercise techniques for acute and chronic hypofunction
- **Benefit-harm assessment:**
 - Unknown consequences when patients perform an exercise that does not address their primary problem
 - Important to use the most appropriate exercise approach for identified impairments and activity limitations
- **Exclusions:**
 - Cognitive or mobility deficit that impedes effective application or active Meniere's disease

Vestibular Rehabilitation Harm/Benefit Ratio

- **Strong recommendation (Level I-III*)** that quality of life improves and psychological distress reduces with rehabilitation
 - Improvements in perceived disability and anxiety scores
- **Potential negative impact on quality of life**
 - Side effect of neck pain, motion sickness, or nausea
 - No resolution of symptoms

Stopping Vestibular Rehabilitation

- **Expert opinion recommendation (Level V*)** for the decision to stop rehabilitation based on:
 - Goals met; symptoms resolve; reach plateau; patient choice; non-adherence; status deteriorates; prolonged symptom increase; and/or if co-morbidities affect ability to participate
- **General recommendation for overall number of treatment sessions:**
 - Acute/Subacute Unilateral – once per week for 2-3 sessions
 - Chronic Unilateral – once per week for 4-6 weeks
 - Bilateral – once per week for 8-12 weeks
- **Patient populations that may require additional sessions:**
 - Cognitive or mobility deficit
 - Moderate-severe symptoms sensitivity
 - Taking vestibular suppressants
- **Risk:**
 - Prematurely stopping before reach maximum gains
 - Protracted treatment costly

FOR MORE DETAILED INFORMATION, PLEASE REFER TO THE ORIGINAL DOCUMENT:
http://journals.lww.com/jnpt/Fulltext/2016/04000/Vestibular_Rehabilitation_for_Peripheral.8.asp



LEVEL OF EVIDENCE*

I	II	III	IV	V
High quality (>50% critical appraisal score) diagnostic studies, prospective, or randomized controlled trial	Lesser quality (<50% critical appraisal score) diagnostic studies, prospective, or randomized controlled trial	Case-controlled or retrospective studies	Case study or case series	Expert opinion

Based on Centre for Evidence Based Medicine website: <http://www.cebm.net/oxford-centre-evidence-based-medicine-levels-evidence-march-2009/>
 +Hall CD, et al. Vestibular Rehabilitation for Peripheral Vestibular Hypofunction: An Evidence-Based Clinical Practice Guidelines. JNPT. 2016; 40:124-156.